

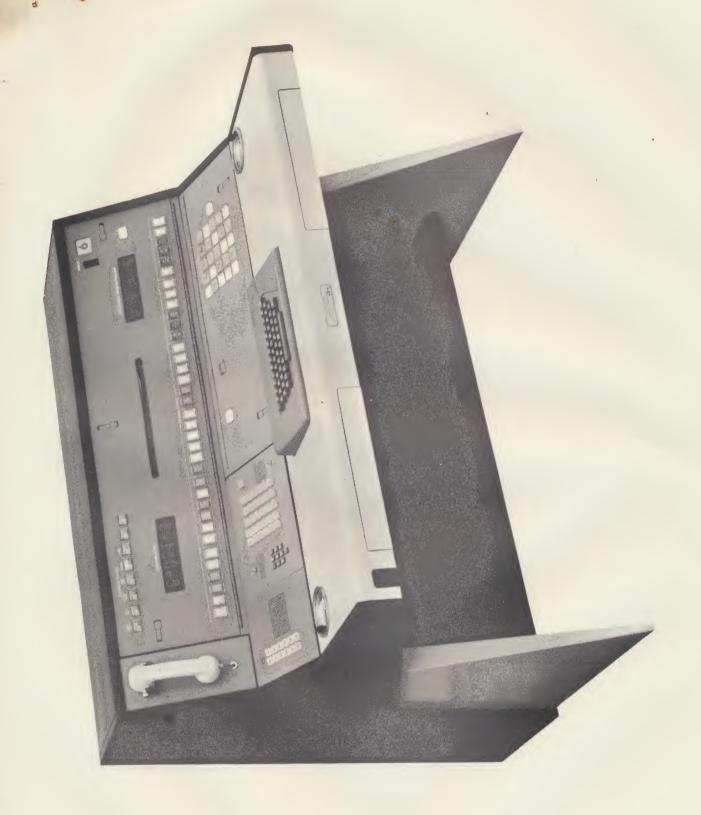
## TASKER COMPUTER COMMUNICATIONS CONSOLE

MODEL 544

The Model 544 Tasker Instruments Corporation Input/Output Computer Communications Console is designed to communicate with an IBM 7288 Data Communications Channel (DCC). Modular construction and the availability of proven circuit designs permit this equipment to be easily programmed for communication with other digital data processing systems. The Model 544 (see Figure 1) contains controls for entering messages and houses visual displays which depict data prior to transmission of a message to the DCC. It also displays data generated by external equipment in the data processing system. An operator can observe the entire outgoing message structure and verify depicted characters prior to transmission. Preselected program options are stored in the I/O console and transmitted at the discretion of an operator through the use of pushbutton switches.

The panel above the keyboard contains 25 special function pushbuttons, a special function clear button, and a transmit message button. Special function buttons are used to set flag bits in the preamble.

The top panel in the console contains program option pushbuttons, digital displays to indicate program status and current computer operating program, console identity, power control, and variable message display. Program option and current computer operating program displays each consist of four alphanumeric indicators. Seven back lighted equipment status lamps indicate the status (operational, marginal, or fail) of associated external equipment such as printers and plotters. The variable message display, located in the center of the top panel, utilizes a horizontal row of four small rectangular cathode-ray tubes which display a total of 72 alphanumeric characters in a single line. This variable message display can be easily modified to a multi-line CRT display. Data for this display is inserted through an alphanumeric keyboard, which also can be easily modified to meet other program requirements.



TASKER INSTRUMENTS CORPORATION

Either the Tasker Model 541 Dot Writing Symbol Generator or Tasker Model 401 Stroke Writing Symbol Generator may be used to generate the characters displayed in the variable message. A flicker free CRT display is obtained by regenerating each character fifty times per second. CRT displays of this type provide thousands of hours of reliable, maintenance free operation. Figure 2 shows unretouched photographs which illustrate the clarity and configuration of the characters generated by the two Tasker Symbol Generators, Models 401 and 541.

A functional block diagram is shown in Figure 3. As the operator composes the variable portion of the message on the keyboard, each character is entered into the delay line. Here it is recirculated and held in storage until the complete message has been entered. The information held in storage is continuously displayed to the operator on the Cathode-Ray Tube Display. This enables the operator to verify the data before it is transmitted.

A complete message consists of a preamble word, containing the console address and the special function switch data; 12 words of variable data, 72 variable characters; and a program option word indicating those program option switches which have been depressed. After message verification the operator depresses the transmit switch and the complete message is transmitted to the 7288 Data Communication Channel.

As an added feature, the Model 544 Computer Communications Console can be used with up to 15 similar subconsoles. The subconsoles operate under the control of one main console. Control logic locks out the main console and other subconsoles so that the one requesting transmission facilities may be actuated.



A. Dot Writer Characters Utilizing Tasker Model 541 Symbol Generator



B. Stroke Writer Characters Utilizing Tasker Model 401 Symbol Generator

Figure 2. Photographs of CRT Displays with Characters generated by Tasker Model 541 and Model 401 Symbol Generators (Unretouched)

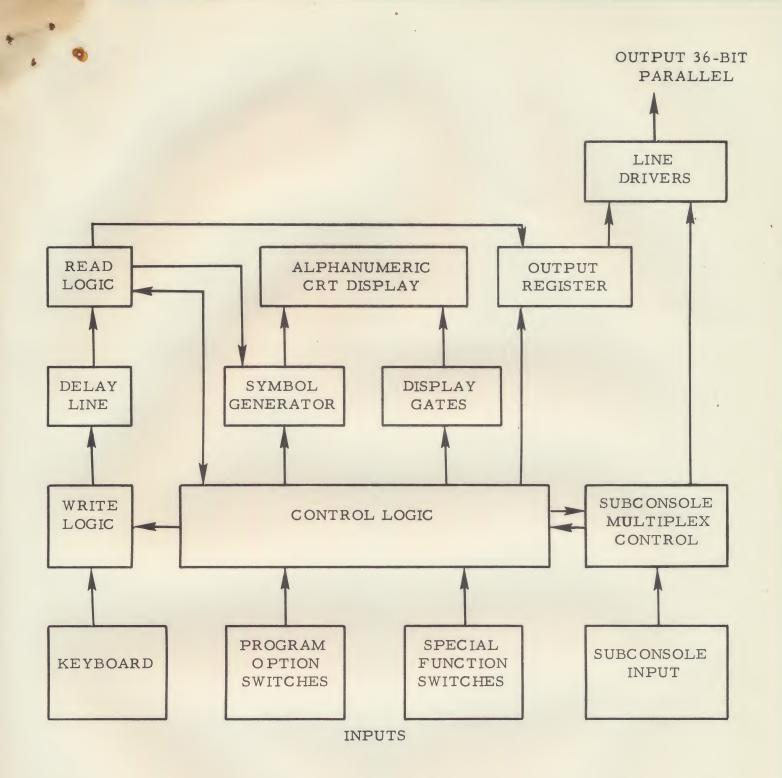


Figure 3. Block Diagram Computer Communications Console

Special Data:

Method of Input: Alphanumeric (FORTRAN) keyboard, program

option switches and special function switches.

Types of Display: Four in-line cathode-ray tubes for variable

message display (72 characters). Bina-View

indicator displays for program options.

Image Sizes: CRT display characters are 1/4-inch high by

3/16-inch wide.

Bina-View characters are 1 1/4-inch wide by

1 1/2-inch high.

Power Requirements: 120 volts ± 10 percent AC, 50 to 60 cps, 15

ampheres at a power factor of 0.85.

Maintenance: This equipment can be maintained using standard

commerical test equipment.

Environment:

Operation: The Model 544 has been designed for operation

with ducted cooling air under a small amount of

pressure, provided by the customer. A self

contained air recirculating system can be

optionally supplied.

Transportation: This equipment will withstand temperatures from

-58 to +70°C and the usual shock and vibration

encountered during shipment.

Useful Life and

Reliability:

The Model 544 design employs proven circuits

and building blocks previously used in systems

which were designed to operate 24 hours a day

for ten years.